small individuals are sometimes swallowed by larger ones, when they will continue to live in the cavity of the body of their devourers for weeks, without any apparent mutual inconvenience.

The animals are able to adhere with any part of the body, probably by means of the urticating threads, which indeed appear, even in the tentacular filaments of the Medusæ, to be more serviceable as adhesive organs than by their venom. They not unfrequently climb up on the wall of the vessel, and then usually adhere by the mouth. Before they distend themselves in order to rest comfortably, their form is very changeable, according as one or another part of the body is more strongly contracted, the tentacles retracted or extended, and so forth. All their movements are very slow: when left quiet, they remain for days lying at the bottom of the vessel, or hanging from the same part of its wall, without any other movements than contractions of the annular muscles, which from time to time proceed from the anterior to the posterior part, in slowly advancing undulations.

EXPLANATION OF PLATE VII. Fig. 4.

Philomedusa Vogtii, in the distended state, magnified three times.

BIBLIOGRAPHICAL NOTICE.

Handbook to the Geology of Weymouth and the Isle of Portland; with Notes on the Natural History of the Coast and Neighbourhood. By Robert Damon. 12mo. E. Stanford, London, 1860.

A Supplement to the Handbook to the Geology of Weymouth and the Isle of Portland. By Robert Damon. 8vo. E. Stanford, London, 1860.

"When George the Third was King," and Weymouth the royal watering-place, few indeed of its visitors cared for amusing themselves by natural-history pursuits more definite than the finding or buying a few odd fossils, or collecting some shells and sea-weeds as curiosities. But modes are much altered with the times; and a large proportion of the visitors and residents at Weymouth, as at nearly all other places of resort for invalids and tourists, have some knowledge of the common things around them, or at least know that real pleasure is to be obtained by the proper exercise of that almost instinctive faculty we all possess of examining for ourselves every animal, plant, and mineral we can find, and getting a systematic knowledge of them. Most guide-books, therefore, now-a-days have some sort of geological appendix for the benefit of those whose eyes are open to the many points of interest, in the structure and physical history of a district, which are invisible to the uninitiated; but here we have a *Geological Handbook*—and a very good one too—for a pleasant locality, rich with a variety of interesting geological phæno-

mena. Just, however, as geology is a combination of all other natural-history sciences, so the Handbook before us gives a fair proportion of botanical and conchological information for the district.

Weymouth has had its scientific observers for many years (as Mr. Damon's list of authors shows), but their writings have been too technical for the world at large; and Mr. Damon has now brought together, in a neat and convenient form, pretty well all about the neighbourhood that is of interest to the general inquirer, and has prepared this information in a clear, systematic, and satisfactory manner. Its speciality, as descriptive of the Weymouth, Portland, and Purbeck coast, its greater conciseness, and more definite treatment of the strata and fossils, distinguish it from the only other purely geological guide-book for this district, namely Mantell's 'Geological Excursions around the Isle of Wight and along the adjacent Coast of Dorsetshire.' Austen's 'Guide to the Geology of Purbeck,' 1852, and Brannon's 'Guide to Swanage and the Isle of Purbeck,' 1859, are less elaborate aids for geologists visiting some parts of the district in question.

The 'Handbook' commences with remarks on the physical features of the Dorsetshire Coast, and on the place in the series of rock-formations that the strata of Dorsetshire hold. These strata (from the Fuller's-earth of the Oolite to the superficial gravel) and their characteristic fossils are then concisely described; the places where the latter can best be got at are noted; the most important of the fossils are well portrayed in good-sized woodcuts, as well as sections and views; and considerable information is given respecting the iron, coal, gypsum, alum, clays, cement-stone, building-stone, &c., occurring in the strata. Illustrative notes and explanations of technical words are not wanting.

Special information on some points interesting to the geological observer is given—relating to the faults or cracks whereby the strata have been shifted along extensive lines across the country, also as to the foldings or bendings of the beds of rock, the land-slips, the waste of the coast, Chesil Beach, &c. Popular Notes on Fossils are added; and a short summary or retrospective survey of the Pre-adamitic history of the district (somewhat after the style of Dr. Mantell's eloquent "Retrospect," in the work above alluded to) is offered at page 149. Some previously unpublished species of fossil shells (partly figured in woodcuts in this work) are carefully described, with the aid of Messrs. Morris and Lycett, at pages 172 to 174, and are also figured in lithograph and described in the 'Supplement.' Lists of the sea-, river-, and land-shells of the neighbourhood, the marine crustaceans, the sea-weeds, the rarer land-plants, and of the ferns, complete the 'Handbook.'

Mention of the much-talked-of stone tools of the old Flint-folk of the Valley of the Somme is not omitted (p. 134): and here we may correct Mr. Damon in his referring the "Stone-beads" to "Lunulites," by directing his attention to No. 31 of these 'Annals' (July 1860), p. 35, where their true relationship, as *Orbitolinæ*, amongst the Foraminifera, has been shown by Messrs. Parker and Jones.

The errata to be found in this book, especially in the lists of fossils, are rather too numerous. We may remark, too, that *Serpula*, *Vermilia*, and *Lignite* should not be classed under "Conchifera" (p. 33), nor *Pentacrinus*, *Serpula*, *Vermilia*, *Lignite*, *Selenite*, and *Septaria* be grouped as "Mollusca" (p. 31) by a professed naturalist like our author.

Mr. Damon has conscientiously given references to his authorities; but a revision of the numerous references to what he terms "Geol. Proc." would be desirable; for he confuses together the 'Geol. Proceedings' and the 'Geol. Journal,' and some are obviously incorrect.

It is a pity that the little map attached to this Handbook does not indicate the geological structure of the district. The author, it seems, expects his readers to have Sheet 17 of the Geological Survey Map of Great Britain always in hand when they consult his book. We would suggest that, in the next edition, Mr. Damon should add an illustration, with a fuller account, of the curious "fault" of the Ridgway, of which the railway makes a section at Upway. The author might also draw attention to the great mass of stony material in the Purbeck strata, due to the accumulation of multitudes of the tiny shells of Cypridæ—a fact of corresponding importance to the existence of rocks made up of equally minute Foraminifera, which he has noticed at pages 41 and 153.

The woodcuts in this little work are of superior execution, both as to drawing and engraving. The sections have evidently been prepared by practised surveyors. The plates in the 'Supplement,' nine in number, illustrative of Oolitic Fossils, have been drawn by one of the best of English palæontographists, Mr. C. R. Bone, and are elegant, truthful, and carefully finished. It is to be regretted that this 'Supplement' is of a larger size than the 'Handbook' itself; for they ought to be bound together.

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

June 12, 1860.—Dr. Gray, F.R.S., V.P., in the Chair.

Description of a New Species of Manakin from Northern Brazil. By Philip Lutley Sclater, M.A., Secretary to the Society.

Our Corresponding Member, M. Jules Verreaux, of Paris, has kindly sent to me for examination a specimen of a Manakin lately received by one of his correspondents from Para, which seems to belong to a different species from any heretofore described. Its nearest ally is certainly *Pipra filicauda* of Spix; but it is readily distinguishable from that and every other member of the group, with which I am acquainted, by the form of the tail-feathers. The outer rectrices are acuminated and produced; the second, third, and succeeding pairs in a less degree than the first; the outer pair exceeding the